

Notice of Allowability

Application No.

10/758,609

Examiner

Pedro J. Cuevas

Applicant(s)

WALTER ET AL.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on March 15, 2006.
2. ☒ The allowed claim(s) is/are 1-54,66-79,90-105,107-110,112,114-117,119 and 121.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 2834

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 36-48, filed on March 15, 2006, with respect to claims 1-54, 66-79, 90-105, 107-110, 112, 114-117, 119, and 121 have been fully considered and are persuasive. The rejections of claims 1-54, 66-79, 90-105, 107-110, 112, 114-117, 119, and 121 has been withdrawn.

Election/Restrictions

2. This application is in condition for allowance except for the presence of claims 55-65, 80-89, 106, 11, 113, 118, and 102 directed to an invention non-elected without traverse. Accordingly, claims 55-65, 80-89, 106, 11, 113, 118, and ¹²⁰~~102~~ have been cancelled.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in the Response to Election / Restriction filed on August 31, 2005.

The application has been amended as follows: Please cancel claims 55-65, 80-89, 106, 11, 113, 118, and 102.

Allowable Subject Matter

4. Claims 1-54, 66-79, 90-105, 107-110, 112, 114-117, 119, and 121 are allowed.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination, does not teaches:

the construction of a generator system as described on:

independent claim 1, comprising a switch coupling the outputs of the first and second voltage sources in parallel when the switch is in a first position and in series when the switch is in a second position, the first output voltage produced at the outputs of the first and second voltage sources when the switch is in the first position and the second output voltage produced across the series coupled outputs of the first and second voltage sources when the switch is in the second position with the first output voltage also produced at the outputs of the first and second voltage sources when the switch is in the second position;

independent claims 35, 50, and 54, comprising an AC generator having an output coupled to a cycloconverter, the cycloconverter having a positive bank of naturally commutated switching devices and a negative bank of naturally commutated switching devices; and

the design of a method of controlling a generator system as described on:

independent claim 66, comprising the steps of:

coupling the outputs of the first and second voltage sources in parallel and operating the first and second voltage sources so that the voltages at the outputs of the first and second voltage sources are in phase when the generator system is in the first mode; and

coupling the outputs of the first and second voltage sources in series and operating the first and second voltage sources so that the

voltages at the outputs of the first and second voltage sources are one-hundred and eighty degrees out of phase when the generator system is in the second mode with the second output voltage produced across the series coupled outputs of the first and second voltage sources and the first output voltage produced at each of the outputs of the first and second voltage sources;

independent claim 90, comprising the step of:

developing control waves based upon the position of a rotor of the AC generator and using the control waves to control switching of the naturally commutated switching devices; and

independent claim 99, comprising the step of:

operating the positive and negative banks of the cycloconverter in a non-circulating mode and enabling one of the positive and negative banks and disabling the other of the positive and negative banks based on the instantaneous output current of the cycloconverter produced at an output of the cycloconverter transitioning between positive and negative or between negative and positive.

Dependent claims 2-34, 36-49, 51-53, 67-79, 91-98, 100-105, 107-110, 112, 114-117, 119, and 121 are considered allowable by their respective dependence on allowed independent claims 1, 35, 50, 54, 66, 90, and 99.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2834

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

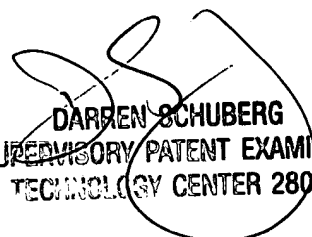
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pedro J. Cuevas
April 3, 2006


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800